

REMARKS

Status of the Claims

The Final Office Action mailed February 24, 2009 noted that claims 1-16 were pending and rejected all claims. Claims 1 and 9 are amended. No claims are cancelled. No new claims are added. No new matter is believed to be presented.

A Request for Continued Examination is submitted concurrently herewith. It is respectfully submitted that claims 1-16 are pending and under consideration.

Objection to the Specification

The Office Action, on page 2, objected to the Specification as failing to provide proper antecedent basis for "is arranged in an allowable order." This objection is respectfully traversed.

The amendment to the independent claims to recite "predefined allowable arrangement of basic instructions" should assist in clarifying their distinguishing features and should assist the Examiner in analyzing the antecedent basis for "is arranged in an allowable order." In addition, the Examiner is respectfully reminded that "[t]he mere fact that a term or phrase used in the claim has no antecedent basis in the specification disclosure does not mean, necessarily, that the term or phrase is indefinite. There is no requirement that the words in the claim must match those used in the specification disclosure." (See MPEP 2173.05).

Figure 11 and the corresponding discussion of Figure 11 the Specification support "is arranged in an allowable order." Paragraph [0112] notes that "22 sets of basic instructions listed in FIG. 11 are allowed as an arrangement of a VLIW instruction." In other words, a check for interdependence and proper arrangement is required. Thus, at least paragraph [0112] and Figure 11 support "determining whether said basic instruction is arranged in an allowable order" and withdrawal of the objection is requested.

Rejection under 35 U.S.C. § 103(a)

The Office Action, on page 2, rejected claims 1-16 under 35 U.S.C. § 103(a) as being unpatentable over discussion of related art (RA) in the instant Specification and Official Notice. This rejection is respectfully traversed below.

It is respectfully submitted that nothing in RA teaches "determining whether said basic instruction is arranged in an allowable order" and "the computer is a variable length Very Long Instruction Word processor with predefined allowable arrangement of basic instructions, the

computer having a plurality of physical instruction slots and a plurality of functional units corresponding one-to-many or many-to-many.” As can be seen in Figure 1 of the Application, a conventional VLIW processor did not provide for “a plurality of physical instruction slots and a plurality of functional units corresponding one-to-many or many-to-many.” Rather as seen in Figure 1, each instruction slot corresponds to a single functional unit (one-to-one). For example, instruction slot 0 corresponds to IU0. However, as seen in Figure 10 of the Application, a single physical instruction slot corresponds one-to-many or many-to-many to a plurality of functional units and thus, it is important that each instruction is arranged in an allowable order. Page 10, lines 6-23 of the instant Specification cited by the Office Action, do not teach the above features and as seen in Figure 11, the instance of blank spaces in instruction slots (NOPs) is reduced compared to the conventional processor.

The features added to independent claim 1 also assist in clarifying the distinctive features of “assigning, to a physical instruction slot, said basic instruction determined to be assignable to said logical instruction slot” recited in claim 1 which is not taught by RA and Official Notice.

Claim 9 patentably distinguishes over RA and Official Notice because nothing in RA teaches “determining whether said basic instruction is arranged in an allowable order” and “the computer is a variable length Very Long Instruction Word processor with predefined allowable arrangement of basic instructions, the computer having a plurality of physical instruction slots and a plurality of functional units corresponding one-to-many or many-to-many” and “assigning, to a physical instruction slot, said basic instruction determined to be assignable to said logical instruction slot.”

The dependent claims depend from the above-discussed independent claims and are patentable over RA and Official Notice for the reasons discussed above. The dependent claims also recite additional features not taught or suggested by Related Art and Official Notice. For example, claim 5 recites “said determining includes a step of identifying said **logical instruction slot** having a lowest numeral determined to be assignable.” The Office Action asserts on page 3 that Figure 3, time 2 and 3 teach these features. But Figure 3 is unrelated to identifying a logical instruction slot, but rather Figure 3 simply shows instruction slots. (See Specification, page 5, lines 9-17, Figure 19 of Specification, and page 33, lines 8-29). It is submitted that the dependent claims are independently patentable over Related Art and Official Notice.

Summary

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 6-24-09

By: John R. Bednarz
John R. Bednarz
Registration No. 62,168

1201 New York Avenue, N.W., 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501